Docket No. 1204.45684X00 Appln. No. 10/560,073

April 10, 2009

AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

- 1. (Cancelled).
- 2. (Previously presented) The adhesive film according to claim 33, wherein the (B) epoxy resin contains a tri- or more functional epoxy resin and/or an epoxy resin which is solid at room temperature.
- 3. (Withdrawn) The adhesive film according to claim 33, wherein the (B) epoxy resin contains 10 to 90% by weight of a tri- or more functional epoxy resin, and 10 to 90% by weight of an epoxy resin which is liquid at room temperature.
 - 4. and 5. (Cancelled).
- 6. (Previously presented) The adhesive film according to claim 33, wherein (C) an epoxy resin curing agent is further contained.
- 7. (Original) The adhesive film according to claim 6, wherein the (C) epoxy resin curing agent is a phenol-based compound having 2 or more hydroxy groups in a molecule and having a number average molecular weight of 400 to 1500.

- 8. (Withdrawn) The adhesive film according to claim 6, wherein the (C) epoxy resin curing agent is a naphthol-based compound having 3 or more aromatic rings in a molecule or a trisphenol-based compound.
- 9. (Previously presented) The adhesive film according to claim 7, wherein an equivalent ratio of an epoxy equivalent of the (B) epoxy resin and an OH equivalent of the (C) epoxy resin curing agent is 0.95 to 1.05:0.95 to 1.05.
- 10. (Withdrawn) The adhesive film according to claim 33, wherein the (A) polyimide resin is a polyimide resin obtained by reacting a tetracarboxylic acid dianhydride, and diamine containing 1% by mol or more of total diamine of aliphatic etherdiamine represented by the following formula (I):

$$H_2N - Q^1 + Q - Q^2 + Q - Q^3 - NH_2$$
 (1)

(wherein Q¹, Q² and Q³ each represent independently an alkylene group having 1 to 10 carbon atoms, and m represents an integer of 2 to 80).

11. (Withdrawn) The adhesive film according to claim 33, wherein the (A) polyimide resin is a polyimide resin obtained by reacting a tetracarboxylic acid dianhydride, and diamine containing 1 to 90% by mol of total diamine of aliphatic etherdiamine represented by the following formula (I):

$$H_2N-Q^1+O-Q^2+mO-Q^3-NH_2$$
 (1)

(wherein Q¹, Q² and Q³ each represent independently an alkylene group having 1 to 10 carbon atoms, and m represents an integer of 2 to 80), 0 to 99% by mol of total diamine of aliphatic diamine represented by the following formula (II):

$$H_2N \left(CH_2\right)_n NH_2$$
 (II)

(wherein n represents an integer of 5 to 20),

and 0 to 99% by mol of total diamine of siloxanediamine represented by the following formula (III):

$$H_2N-Q^4-Si-Q^5 O-Si-Q^9-NH_2$$
 $Q^6 Q^8 P$
 $Q^8 P$
 $Q^8 P$
 $Q^8 P$
 $Q^8 P$
 $Q^8 P$
 $Q^8 P$

(wherein Q⁴ and Q⁹ each represent independently an alkylene group having 1 to 5 carbon atoms or an optionally substituted phenylene group, Q⁵, Q⁶, Q⁷ and Q⁸ each represent independently an alkyl group having 1 to 5 carbon atoms, a phenyl group or a phenoxy group, and p represents an integer of 1 to 5).

12. (Withdrawn) The adhesive film according to claim 33, wherein the (A) polyimide resin is a polyimide resin obtained by reacting a tetracarboxylic acid dianhydride containing 50% by mol of total tetracarboxylic acid dianhydride of tetracarboxylic acid dianhydride containing no ester linkage, and diamine.

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13. (Withdrawn) The adhesive film according to claim 12, wherein the tetracarboxylic acid dianhydride containing no ester linkage is tetracarboxylic acid dianhydride represented by the following formula (IV):

14. (Withdrawn) The adhesive film according to claim 2, wherein the tri- or more functional epoxy resin is a novolak-type epoxy resin represented by the following formula (VII);

(wherein Q¹⁰, Q¹¹ and Q¹² each represent independently hydrogen, an alkylene group having 1 to 5 carbon atoms, or an optionally substituted phenylene group, and r represents an integer of 1 to 20).

- 15. (Previously presented) The adhesive film according to claim 33, which further contains (D) filler.
- 16. (Original) The adhesive film according to claim 15, wherein the (D) filler is insulating filler.

- 17. (Previously presented) The adhesive film according to claim 15, wherein an average particle diameter of the (D) filler is 10 μ m or smaller, and a maximum particle diameter of the (D) filler is 25 μ m or smaller.
- 18. (Previously presented) The adhesive film according to claim 15, wherein a content of the (D) filler is 1 to 50% by volume.
 - 19. and 20. (Cancelled).
- 21. (Withdrawn) An adhesive sheet, characterized in that a substrate layer, a self-adhesive layer, and the adhesive film layer as claimed in claim 33 are formed in this order.
- 22. (Withdrawn) The adhesive sheet according to claim 21, wherein the self-adhesive layer is a radiation curing-type self-adhesive layer.
- 23. (Withdrawn) A semiconductor device having a structure in which at least one of (1) a semiconductor chip and a semiconductor-carrying support member, and (2) semiconductor chips are adhered via the adhesive film as claimed in claim 33.

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24. (Withdrawn) The adhesive film according to claim 8, wherein an

equivalent ratio of an epoxy equivalent of the (B) epoxy resin and an OH equivalent

of the (C) epoxy resin curing agent is 0.95 to 1.05:0.95 to 1.05.

25. (Previously presented) The adhesive film according to claim 16,

wherein an average particle diameter of the (D) filler is 10 μ m or smaller, and a

maximum particle diameter of the (D) filler is 25 μ m or smaller.

26. (Previously presented) The adhesive film according to claim 16,

wherein a content of the (D) filler is 1 to 50% by volume.

27. (Withdrawn) An adhesive sheet, characterized in that a substrate

layer, a self-adhesive layer, and the adhesive film layer as claimed in claim 6 are

formed in this order.

28. (Withdrawn) The adhesive sheet according to claim 27, wherein the

self-adhesive layer is a radiation curing-type self-adhesive layer.

29. (Withdrawn) An adhesive sheet, characterized in that a substrate

layer, a self-adhesive layer, and the adhesive film layer as claimed in claim 15 are

formed in this order.

30. (Withdrawn) The adhesive sheet according to claim 29, wherein the

self-adhesive layer is a radiation curing-type self-adhesive layer.

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- 31. (Withdrawn) A semiconductor device having a structure in which at least one of (1) a semiconductor chip and a semiconductor-carrying support member, and (2) semiconductor chips are adhered via the adhesive film as claimed in claim 6.
- 32. (Withdrawn) A semiconductor device having a structure in which at least one of (1) a semiconductor chip and a semiconductor-carrying support member, and (2) semiconductor chips are adhered via the adhesive film as claimed in claim 15.
- 33. (Currently amended) An adhesive film having at least an adhesive layer, wherein the adhesive layer contains (A) a polyimide resin having a SP value of 10.0 to 11.0 (cal/cm³) ^{1/2}, a weight average molecular weight in the range of 10,000 to 200,000, and a Tg in the range of -20 to 60°C, and (B) an epoxy resin,

1 to 50 parts by weight of the (B) epoxy resin is contained relative to 100 parts by weight of the (A) polyimide resin,

the (A) polyimide resin contains one or more kinds of polyimide resinsresin, at least one of the polyimide resins being obtained by reacting a diamine and an acid dianhydride satisfying the condition where a difference between a heat generation initiating temperature and a heat generation peak temperature by means of DSC is 10°C or smaller, and the polyimide obtained by reacting the diamine and the acid dianhydride is contained at 50% by weight or more of a total polyimide resin,

a tan δ peak temperature is -20 to 60°C, which is obtained by measuring the film which has been heated and cured under conditions of 180°C and 5 hours,

and a flow amount is 100 to 1500 μm , which is obtained by applying a load of 100 kgf/cm² thermally pressing the film for 120 sec.